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(54) Title: METHOD AND APPARATUS FOR DIAGNOSING NEOVASCULARIZED TISSUES

(57) Abstract: A method for detecting neovascularized tissue includes placing a tissue in the path of a light beam, measuring a polarization shift of the light beam, and detecting neovascularized tissue if the measured polarization shift corresponds to a polarization shift of a neovascularized tissue. An apparatus for detecting neovascularized tissue includes a laser, a polarizer coupled to the laser, a tissue sample holder coupled to the polarizer, an analyzer coupled to the tissue sample holder, a detector coupled to the analyzer, and a data acquisition system coupled to the detector, the data acquisition system configured to measure a polarization shift of a light beam emitted by the laser and diagnose an ocular disease if the measured polarization shift corresponds to a polarization shift of a neovascularized tissue.

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